



**Becoming Best in Midwest for Tech Talent**  
Governor's Conference on Economic Development

September 6, 2018



The Wall Street Journal

August 4, 2014 · 🌐



By 2020, an estimated one million computer programming jobs in the U.S. will go unfilled, according to the U.S. Bureau of Labor Statistics.



## Computer Programming Is a Trade; Let's Act Like It

WSJ columnist Christopher Mims on how to offset the mismatch between programmer supply and demand.

[ONLINE.WSJ.COM](http://ONLINE.WSJ.COM)



# WHY?



# Tech degrees wanted, and...

71% of web developer jobs

79% of Javascript dev jobs

74% of UI designer jobs

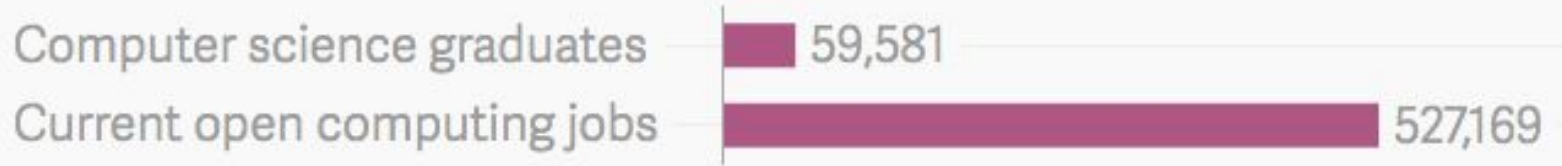
76% of UX designer jobs

87% of mobile apps dev jobs



# ...people don't have them

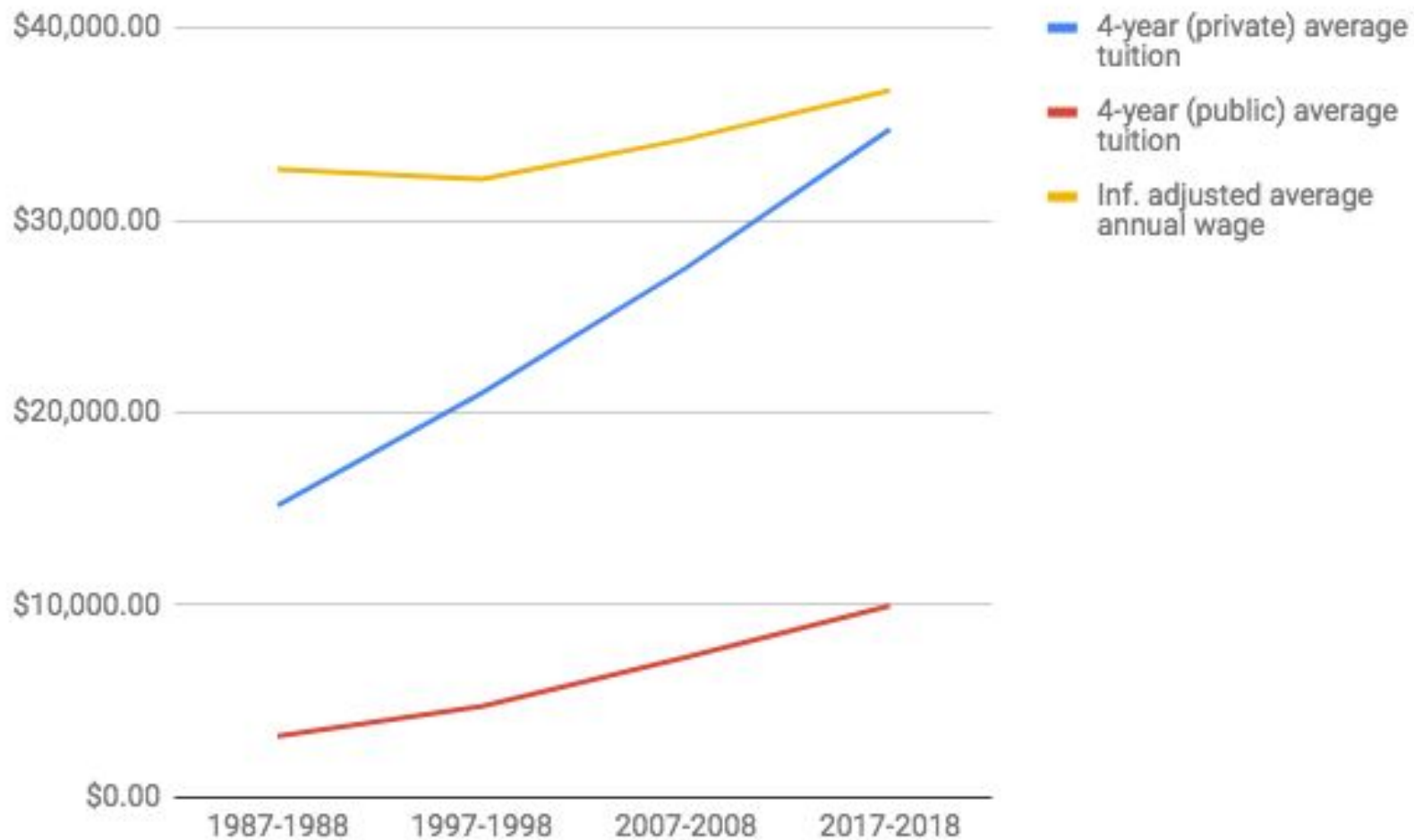
## 2015 college computer science graduates v. open computing jobs



ATLAS | Data: National Center for Education Statistics, Code.org

Share



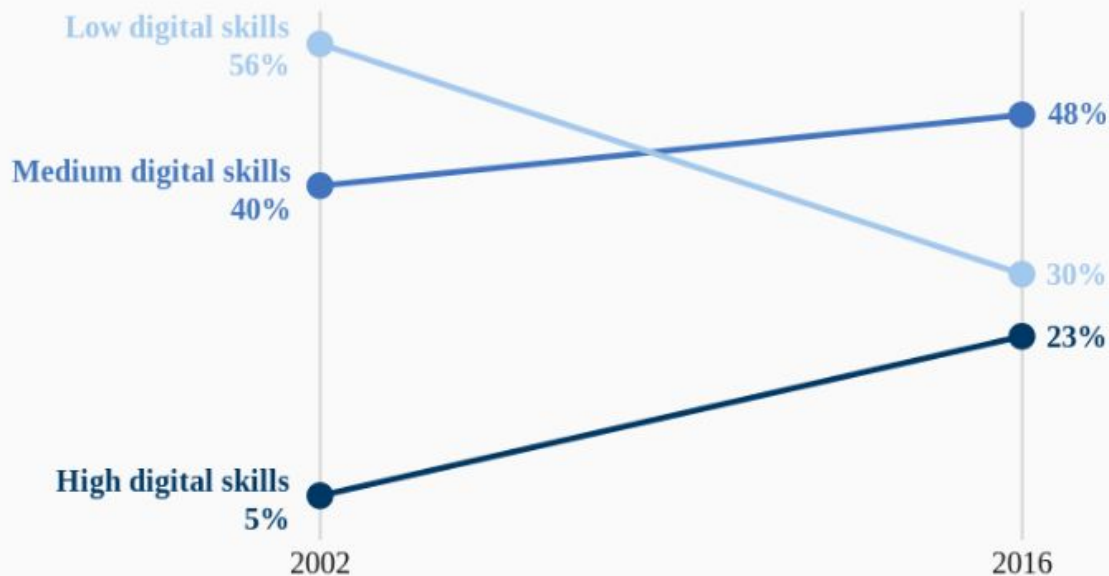


**WHY DOES IT  
MATTER?**



## Share of jobs in low, medium, and high digital skill occupations

2002 and 2016







“Job growth has been rapid in high-digital level occupations, such as computer-mathematical and business-finance occupational groups. By contrast, middle-digital occupations have seen much slower job growth.”



“Mean annual wage, 2016: high-level digital occupations = \$72,896. Middle-level digital jobs = \$48,274. Low-level digital occupations = \$30,393.”



“Between 2010 and 2016, occupations with high-level digital scores on average registered more than 0.8 percent wage growth annually, compared to middle-level annual wage growth of 0.3 percent, versus annual wage declines of 0.2 percent for low-level occupations.”



“Nearly 60 percent of tasks performed in low-digital occupations appear susceptible to automation, but only around 30 percent of tasks in highly digital occupations appear susceptible to automation.”





**KCUR 89.3**

# **Report: Missouri Employers Struggle To Find Qualified Workers**

By ANNA YAKUTENKO • JUN 9, 2018

According to a 2017 annual report by the Tech Council, a regional advocate for Kansas City's tech industry, Kansas City had more than 10,000 open computing positions last year, but only a thousand computer science graduates who could fill those positions.



# Why didn't Amazon choose St. Louis?

## The company had at least one main concern.



BY KELSEY LANDIS

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April 04, 2018 05:06 PM

Updated April 05, 2018 01:20 PM



The lack of a "blueprint for talent" was one of the reasons online retail giant Amazon **didn't choose** the St. Louis region for its new headquarters, the CEO of an economic development agency said Wednesday at a Belleville Chamber of Commerce breakfast.



# Post-Dispatch: August, 14, 2018



Tech skill warning: If firms can't find workers here, they'll go elsewhere

61 percent of technology employers say they face shortage of skilled applicants



# The gap inhibits growth

How do you feel the tech talent shortage has affected your business?

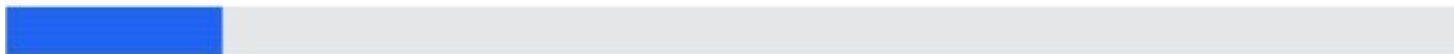
83%

It has hurt our business through lost revenue, slower product development, market expansion or increased employee tension and burnout



16%

It has not hurt our business

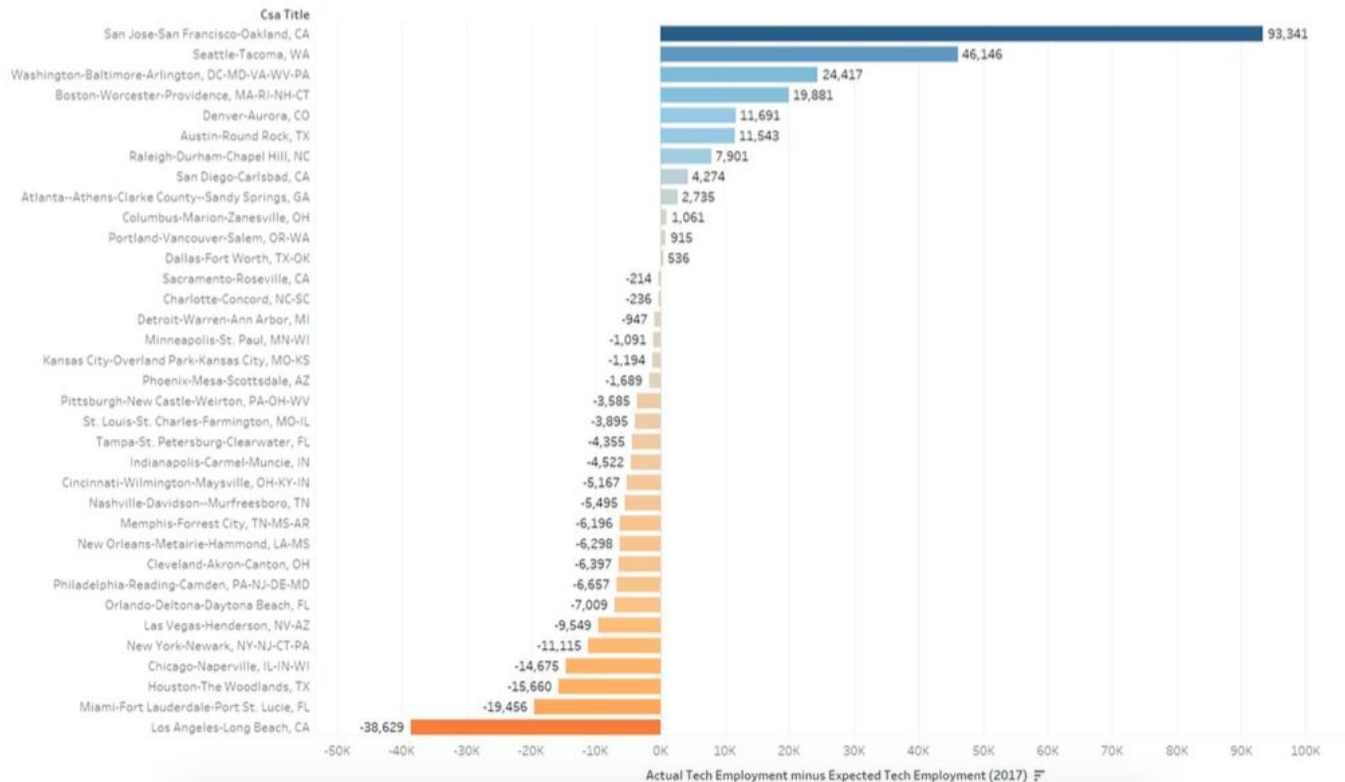


# MISSOURI'S PROBLEM



# The LaunchCode Index

The LaunchCode Index



MSA	Actual software employment	Expected software employment	Index
Kansas City-Overland Park-KC, MO-KS	15,360	16,554	-1,194
St. Louis-St. Charles-Farmington, MO-IL	15,590	19,485	-3,895
Springfield-Branson, MO	1,780	2,109	-329
Columbia-Moberly-Mexico, MO	900	624	276





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Springfield-Branson, MO	1,780	2,109	-329
Columbia-Moberly-Mexico, MO	900	624	276
Nashville-Davidson-Murfreesboro, TN	7,900	13,395	-5,495
Memphis-Forrest City, TN-MS-AR	2,530	8,726	-6,196
Chicago-Naperville, IL-IN-WI	52,150	66,824	-14,675
Cincinnati-Wilmington-Maysville, OH-KY-IN	9,980	15,147	-5,167
Indianapolis-Carmel-Muncie, IN	11,410	15,932	-4,522
Minneapolis-St. Paul, MN-WI	28,280	29,371	-1,091
Cleveland-Akron-Canton, OH	15,410	21,807	-6,397
Columbus-Marion-Zanesville, OH	15,920	14,859	1,061



A photograph of a group of people seated in a lecture hall or classroom. In the foreground, a man with glasses and a beard is focused on his laptop, with his hand near his face. Behind him, other attendees are visible, some looking towards the front of the room. The word "COST" is overlaid in large white letters across the center of the image.

COST

# SPEED

launch  \_code



A man with dark hair, a beard, and glasses is wearing a blue and white checkered button-down shirt. He is leaning forward over a silver laptop on a wooden desk, looking at the screen with a slight smile. His right hand is resting on the laptop's trackpad. The background shows an office environment with cubicles, perforated metal dividers, and a modern ceiling with exposed pipes and lights. A white ergonomic office chair is visible behind him.

SCALE

A photograph of two women in the foreground, focused on their work. The woman on the left is Black, wearing a black headband with a floral pattern and a black mesh top. She is looking down at a laptop. The woman on the right is white, wearing a red and white Adidas shirt, and is also looking at a laptop. In the background, two other people are visible, working at their own desks. The setting appears to be a modern office or classroom with large windows.

# ORIENTATION TO RISK & FAILURE



## Mission

LaunchCode is building a skilled workforce by creating pathways for driven people seeking careers in technology.

a 501(c)3 nonprofit organization





# COST

LaunchCode training is FREE to participants. Earned revenue is generated through placements.

- \$120K per class / 165 students per class
- \$727 per enrollee, \$1,121 per completer
- If  $\frac{1}{2}$  complete &  $\frac{1}{2}$  completers  $\rightarrow$  \$2,926 per new developer created



# SPEED

Typical job-focused LaunchCode program is 20-28 weeks long.

- Part-time: 6 hours per week in class, evenings
  - Organic candidates can be placed into apprenticeship in a matter of days

Ordinary apprenticeship lasts 90-120 days.





# SCALE

Training uses centralized curriculum, constantly iterated and deployed scalably via tech platform:

- 60 days to deploy full class in new market
- Per class costs decrease as class instances increase

Organic pipeline in any market -- just turn on ads.



# RISK & FAILURE

**TIRED:** High barrier to entry. High cost. Full-time. Long timeline. High costs of failure. Limited adoption. Exploration discouraged. Tight front screen.

**WIRED:** Low barrier to entry, low/no cost. Accessible. Accelerated. Very low cost of failure. Broad possible adoption. Exploration encouraged. Loose front screen.



# Training

## **Courses: LC101, CoderGirl, CodeCamp**

We offer a range of free education courses in cities across the U.S.. They're designed to take students from core coding concepts to more in-depth job skill tracks.

## **Targeted Training: Pega, COBOL, Cybersecurity, ServiceNow, Product Owners, GIS**

We train new candidates or your existing workforce in additional key skills. With our agile, scalable model, we're able to tackle skill building wherever you need it.

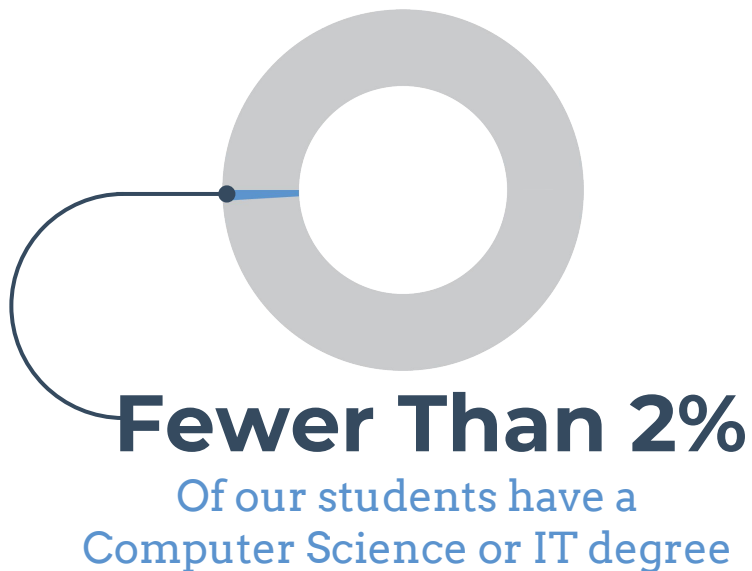
## **Job-Readiness: Workshops, Mentoring, Soft Skills + more**

We go beyond technical skills to train candidates in job preparedness to ensure they can mesh well with your team.



# Training Facts & Figures

## Our Students



**4,600**  
Educated

**41%**  
People of  
Color

**38%**  
Female  
Students



# Job placement & apprenticeship

We find motivated, eager learners with the coding chops and soft skills you're looking for.

## Code Skills

- HackerRank Coding Test
- Evaluate Logic and Method
- Project Review

## Soft Skills

- Interview with LaunchCode
- Traditional Resume Review
- Professionalism, Written & Verbal Communication



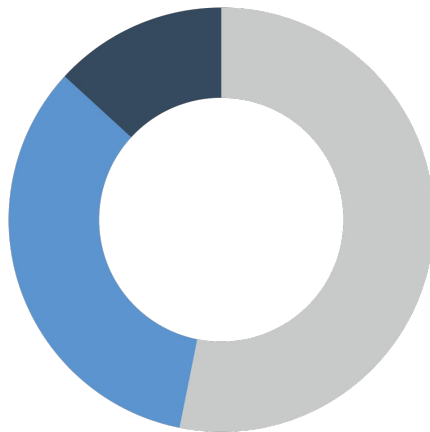
# Placement Facts & Figures

## Our Placements & Apprentices

**1,300+**  
Careers  
Launched

More Than  
**4/5**  
Hired On  
Permanently

**48%**  
Unemployed  
Before LaunchCode



- 32% No 4-year degree
- 11% College Degree in Computer Science
- 57% College degree in a non-CS or IT field





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